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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Alexander Medvinsky

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EXAMINER

TO, BAOTRAN N

ART UNIT

PAPER NUMBER

2135

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/890,180

Applicant(s)

MEDVINSKY ET AL.

Examiner

Baotran N. To

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office action is responsive to the Pre-appeal brief filed on 08/08/2006.

Claims 1-19 are presented for examination.

### ***Response to Arguments***

2. Applicant's arguments, see Remarks for Pre-Appeal Brief Request, filed 08/08/2006, with respect to the rejection(s) of claim(s) 1-4, 6-9, and 11-19 under 102 and claims 5 and 10 under 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Liao.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-9, and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barkan (EP 0738085 A2) herein referred to as Barkan in view of Liao et al. (U.S. Patent 6,240,183 B1) herein referred to as Liao.

Regarding on Claims 1 and 6, Barkan discloses a method for establishing a secure communication channel in an IP telephony network between a first and a second

Art Unit: 2135

user, wherein the first user and the second user are coupled to first and second telephony adapters, which in turn, are coupled to first and second gateway controllers, respectively, wherein the gateway controllers control user access to the IP telephony network, and wherein the telephony adapters encrypt and decrypt user information exchanged over the IP telephony network (Fig. 1), the method comprising:

receiving a request at the first gateway controller (key distribution center 11) to establish a secure communication channel (secure communication link) between the first user (facility 1) and the second user (facility 3) (Fig. 1, col. 6, lines 38-40);

Barkan explicitly does not disclose generating a secret key at the first gateway controller; distributing the secret key to the first and second telephony adapters over previously established secure connections; and establishing the secure communication channel between the first user and the second user by encrypting and decrypting information using the secret key.

However, Liao explicitly discloses generating a secret key at the first gateway controller (abstract); distributing the secret key to the first and second telephony adapters over previously established secure connections (col. 5, lines 25-27); and establishing the secure communication channel between the first user and the second user by encrypting and decrypting information using the secret key (col. 5, lines 40-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Liao's invention with Barkan to include generating a secret key at the first gateway controller; distributing the secret key to the

first and second telephony adapters over previously established secure connections; and establishing the secure communication channel between the first user and the second user by encrypting and decrypting information using the secret key. One of ordinary skill in the art would have been motivated to do so because it would provide secure and authenticated data communications between client computers and server computers as taught by Liao (col. 1, lines 27-30).

Regarding on Claim 2, Barkan and Liao disclose the limitations as discussed in Claim 1 above. Barkan further discloses wherein the step of generating comprises a step of generating a random number at the first gateway controller to be used as the secret key (col. 14, line 59 and col. 15, lines 1-5).

Regarding on Claim 3, Barkan and Liao disclose the limitations as discussed in Claim 1 above. Barkan further discloses wherein the step of generating comprises a step of deriving the secret key at the first gateway controller (col. 15, lines 5-10), wherein the secret key is derived from a signaling key shared between the first telephony adapter and the first gateway controller (col. 15, lines 15-20).

Regarding on Claim 4, Barkan and Liao disclose the limitations as discussed in Claim 1 above. Barkan further discloses transmitting the secret key from the first gateway controller to the second gateway controller (col. 7, lines 45-55); transmitting the secret key from the second gateway controller to the second telephony adapter (col. 7,

lines 45-50), transmitting the secret key from the first gateway controller to the first telephony adapter (col. 6, lines 35-40).

Regarding on Claim 7, Barkan discloses a gateway controller for establishing a secure communication channel in an IP telephony network, the gateway controller coupled between a telephony adapter and a telephony network backbone (Fig. 1), the gateway controller (key distribution center) comprising:

- a key storage module (key management controller) coupled to the key creation module and having logic to store the secret key (col. 8, lines 15-20); and

- a message processor coupled to the key creation module and the key storage module (col. 8, lines 15-20), and having logic to process messages exchanged between the telephony adapter and the telephony network backbone (Fig. 1, element 111) (col. 7, lines 51-54 and col. 14, lines 15-30), wherein the message processor further comprises:

- logic to receive a request to establish a secure communication channel between a first user and a second users the first user couple to the telephony adapter, the second user coupled to a remote telephony adapter (Fig. 1, col. 6, lines 38-40);

Barkan explicitly does not disclose a key creation module having logic to create a secret key; logic to distributed the secret key to the telephony adapters over previously established secure connections, whereby the secure communication channel between the first user and the second user may be established by encrypting and decrypting information using the secret key.

However, Liao explicitly discloses a key creation module having logic to create a secret key (abstract); logic to distributed the secret key to the telephony adapters over previously established secure connections (col. 5, lines 25-27); and whereby the secure communication channel between the first user and the second user may be established by encrypting and decrypting information using the secret key (col. 5, lines 40-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Liao's invention with Barkan to include a key creation module having logic to create a secret key; logic to distributed the secret key to the telephony adapters over previously established secure connections; whereby the secure communication channel between the first user and the second user may be established by encrypting and decrypting information using the secret key. One of ordinary skill in the art would have been motivated to do so because it would provide secure and authenticated data communications between client computers and server computers as taught by Liao (col. 1, lines 27-30).

Regarding on Claim 8, Barkan and Liao disclose the limitations as discussed in Claim 7 above. Barkan further discloses wherein the key creation module has logic to generate a random number as the secret key (col. 14, line 59 and col. 15, lines 1-5).

Regarding on Claim 9, Barkan and Liao disclose the limitations as discussed in Claim 7 above. Barkan further discloses wherein the key creation module has logic to

derive the secret key from a signaling key shared with the telephony adapter (col. 8, lines 15-40).

Regarding on Claim 11, Barkan discloses a system for providing encrypted communications in an IP telephony network, said system comprising:

- a first cable telephony adapter (facility 1 key management device) (col. 5, lines 53-55);

- a first gateway controller (key distribution center 11) coupled with said first cable telephony adapter (col. 6, lines 25-30);

- a second cable telephony adapter (facility 3 key management device) (col. 5, lines 52-55);

- a second gateway controller (key distribution center 12) coupled with said second cable telephony adapter (col. 7, lines 45-50);

- a network coupled with both said first gateway controller and said second gateway controller so as to facilitate communications between said first cable telephony adapter and said second cable telephony adapter wherein said communications are routed via said first gateway controller and said second gateway controller (Fig. 1, col. 5, line 52 through col.12, line 18).

Barkan explicitly does not disclose wherein said first gateway controller comprises: a first key creation module configured to generate a secret key for distribution to both said first cable telephony adapter and said second cable telephony



adapter for use in encrypted communications between said first cable telephony adapter and said second cable telephony adapter.

However, Liao explicitly discloses wherein said first gateway controller comprises: a first key creation module configured to generate a secret key for distribution to both said first cable telephony adapter and said second cable telephony adapter for use in encrypted communications between said first cable telephony adapter and said second cable telephony adapter (col. 5, lines 25-27 and 40-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Liao's invention with Barkan to include wherein said first gateway controller comprises: a first key creation module configured to generate a secret key for distribution to both said first cable telephony adapter and said second cable telephony adapter for use in encrypted communications between said first cable telephony adapter and said second cable telephony adapter. One of ordinary skill in the art would have been motivated to do so because it would provide secure and authenticated data communications between client computers and server computers as taught by Liao (col. 1, lines 27-30).

Regarding on Claim 12, Barkan and Liao disclose the limitations as discussed in Claim 11 above wherein said second gateway controller comprises:

a second key creation module configured to generate a secret key for distribution to both said first cable telephony adapter and said second cable telephony adapter for

use in encrypted communications between said first cable telephony adapter and said second cable telephony adapter (col. 8, lines 30-35 and Abstract, lines 1-5).

Regarding on Claim 13, Barkan and Liao disclose the limitations as discussed in Claim 11 above wherein said first gateway controller further comprises:

a message processor configured to receive an encrypted message from said first cable telephony adapter intended for decryption by said second cable telephony adapter and further configured to forward said encrypted message to said second gateway controller without decrypting said encrypted message (col. 7, lines 51-54 and col. 14, lines 15-30).

Regarding on Claim 14, Barkan and Liao disclose the limitations as discussed in Claim 7 above. Barkan further discloses wherein said key creation module is configured to intermittently generate a second secret key and to distribute said second secret key to said first cable telephony adapter and said second cable telephony adapter so as to replace said previously generated secret key (col. 7, lines 45-59 and col. 8, lines 1-40).

Regarding on Claim 15, Barkan discloses a method of establishing secure communications between a first cable telephony adapter and a second cable telephony adapter in a system in which secure communications do not previously exist between said first cable telephony adapter and said second cable telephony adapter, wherein said first cable telephony adapter is coupled with a first gateway controller, said second

cable telephony adapter is coupled with a second gateway controller, and a network is coupled with said first gateway controller and said second gateway controller (Fig. 1), said method comprising:

receiving at said first gateway controller (key distribution center 11) a request from said first cable telephony adapter to establish communications between said first cable telephony adapter (facility 1 key management device) and said second cable telephony adapter (facility 3 key management device) (Fig. 1, col. 6, lines 38-40);

Barkan does not disclose "generating a secret key at said first gateway controller; distributing said secret key from said first gateway controller to said first cable telephony adapter."

However, Liao explicitly discloses generating a secret key at the first gateway controller (abstract) and distributing said secret key from said first gateway controller to said first cable telephony adapter (col. 5, lines 25-27 and col. 5, lines 40-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Liao's invention with Barkan to include generating a secret key at said first gateway controller and distributing said secret key from said first gateway controller to said first cable telephony adapter. One of ordinary skill in the art would have been motivated to do so because it would provide secure and authenticated data communications between client computers and server computers as taught by Liao (col. 1, lines 27-30).

Barkan and Liao disclose the limitations of claims 15 above. Barkan further discloses distributing said secret key to said second gateway controller via a secure

communication (secure communication link) (col. 7, lines 45-55); distributing said secret key from said second gateway controller (key distribution center 12) to said second cable telephony adapter (col. 7, lines 45-50);

Regarding on Claim 16, Barkan and Liao disclose the limitations as discussed in Claim 15 above. Barkan further discloses encrypting a message at said first cable telephony adapter with said secret key (col. 6, lines 30-35); sending said encrypted message to said first gateway controller (col. 9, lines 45-50); receiving said encrypted message at said first gateway controller (col. 6, lines 25-40); forwarding said encrypted message from said first gateway controller to said second gateway controller without decrypting said encrypted message (col. 10, lines 45-55).

Regarding on Claim 17, Barkan and Liao disclose the limitations as discussed in Claim 15 above. Barkan further discloses receiving said encrypted message at said second gateway controller (col. 10, lines 45-50); forwarding said encrypted message from said second gateway controller to said second cable telephony adapter without decrypting said message (col. 10, lines 35-55); decrypting said encrypted message at said second cable telephony adapter (col. 15, lines 17-20).

Regarding on Claim 18, Barkan and Liao disclose the limitations as discussed in Claim 15 above. Barkan further discloses encrypting a message at said first cable telephony adapter with said secret key (col. 6, lines 30-35); sending said encrypted

message to said first gateway controller (col. 9, lines 45-50); receiving said encrypted message at said first gateway controller (col. 6, lines 25-40); routing said encrypted message from said first gateway controller to said second cable telephony adapter (col. 12, lines 5-15).

Regarding on Claim 19, Barkan and Liao disclose the limitations as discussed in Claim 15 above. Barkan further discloses receiving said encrypted message at said second cable telephony adapter (col. 15, lines 15-17); decrypting said encrypted message at said second cable telephony adapter with said secret key (col. 15, lines 17-20).

4. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barkan and Liao as applied to claims 1 and 7 above, and further in view of Ganesan (U.S. Patent 5,535,276) herein referred to as Ganesan.

Regarding on Claim 5, Barkan and Liao disclose the limitations as discussed in Claim 1 above. Barkan and Liao do not disclose "receiving a request at the first gateway controller to provide the secret key to a law enforcement server; and providing the secret key to the law enforcement server."

However, Ganesan discloses receiving a request at the first gateway controller to provide the secret key to a law enforcement server; and providing the secret key to the law enforcement server (Fig. 2, col. 17, lines 25-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Ganesan's invention with Barkan and Liao to provide the secret key to a law enforcement server with the motivation to allow the government access to messages.

Regarding on Claim 10, Barkan and Liao disclose the limitations as discussed in Claim 7 above. Barkan further discloses wherein the key storage module has logic to encrypt the secret key before storage (col. 10, lines 20-25), but Barkan and Liao explicitly do not disclose using a public/private key pair belonging to law enforcement.

However, Ganesan discloses using a public/private key pair belonging to law enforcement (col. 9, lines 40-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Ganesan's invention with Barkan and Liao to use a public/private key pair belonging to law enforcement with the motivation to allow the law enforcement to check on communications between users.

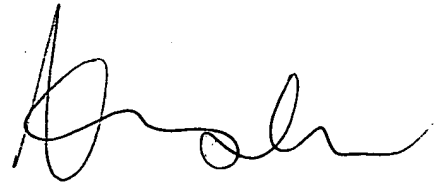
#### ***Information Contact***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baotran N. To whose telephone number is 571-272-8156. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

Art Unit: 2135

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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10/05/2006

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